

CLAIMS

1. A method of increasing the lactic acid producing bacteria in the intestine by ingesting treated water wherein the treated water contains elevated levels of dissolved oxygen.

2. The method of claim 1 wherein the levels of dissolved oxygen in the treated water are greater than 8 parts per million (ppm).

3. The method of claim 1 wherein the levels of dissolved oxygen in the treated water is in the range of 10-45 parts per million (ppm).

4. A method of decreasing the coliform producing bacteria in the intestine by ingesting treated water wherein the treated water contains elevated levels of dissolved oxygen.

5. The method of claim 4 wherein the levels of dissolved oxygen in the treated water are greater than 8 parts per million (ppm).

6. The method of claim 4 wherein the levels of dissolved oxygen in the treated water is in the range of 10-45 parts per million (ppm).

7. A method of reducing the bacterial load in the digestive tract of poultry by feeding the poultry treated water containing elevated levels of dissolved oxygen.

8. A method of preventing necrotic enteritis in poultry by feeding the poultry treated water containing elevated levels of dissolved oxygen.

9. A method of treating water comprising,
inputting water to a water treatment filter;

modifying the water in the water treatment filter to remove minerals that are present in hard water;

outputting the water from the water treatment filter;

measuring the flow rate of water after it has left the water treatment filter;

inputting the water to an electrocatalytic converter which causes electrical current to pass through the water;

flowing the water out of the electrocatalytic converter into a holding chamber;

pressurizing the holding chamber; and

outputting the water from the holding chamber into a pipeline connected to a poultry drinking system.

10. The method according to claim 9 wherein the step of modifying the water includes removing selected metals from the water.

11. The method according to claim 9, further including replacing the calcium atoms removed from the water with sodium to make the water soft water.

12. The method according to claim 10 wherein the calcium that is removed includes magnesium and the replacement atom includes sodium.

13. The method according to claim 9, further including outputting a measurement of the flow rate into an electronic sensor, and modifying the current density flowing through the water from the electrocatalytic converter based on the value of the flow rate.

14. The method according to claim 13 wherein the amount of current increases proportional to increases in the flow rate.

15. The method of claim 9 wherein the pressurizing of the holding chamber includes holding the treated water in a pressure tank for a specified amount of time to allow further dissolution of oxygen into the water.

16. An apparatus for treating water comprising:
an electrocatalytic cell having a plurality of conductive plates with spaces therebetween through which water may pass;
an inlet for water to flow into the electrocatalytic cell;
a flow meter coupled in the flow line prior to the inlet for measuring the flow rate of water into the inlet;
an outlet from the electrocatalytic cell for receiving water which has passed through the electrocatalytic cell;
a pressure tank coupled to the outlet for receiving and pressurizing the treated water; and
an outlet pipe coupled to an outlet from the pressure tank for supplying the treated water for an end use.

17. The apparatus according to claim 16, further including a gas release valve coupled to the outlet for permitting gas to escape in the outlet prior to the outlet pipe.

18. The apparatus according to claim 16, further including a water treatment filter positioned in the water inlet line prior to the flow meter for modifying the hardness of the water prior to water flowing into the electrocatalytic cell.

19. The apparatus according to claim 16, further including a control unit to modify the current density in the conductive plates based on the flow rate of the water.

20. The apparatus according to claim 19 wherein the control unit further includes a memory storage unit coupled to a control unit, the memory storage unit storing an on/off time, a value of the current flow, and a flow rate on a continuous real-time basis.